User Guide

Linksys WAP300N

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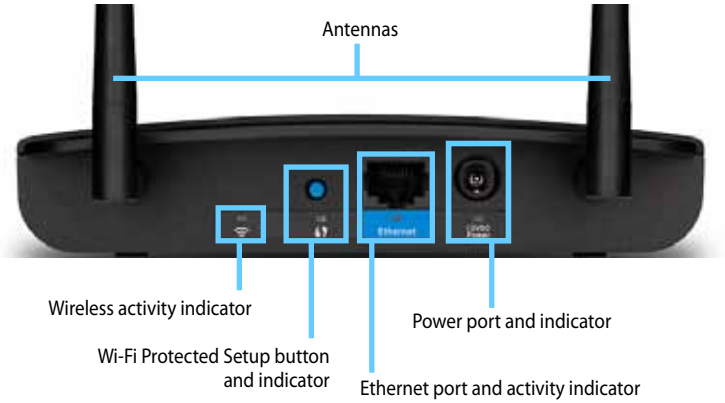
Overview

Package contents

In addition to your device, the package includes:

- Quick Installation Guide
- Network (Ethernet) cable
- AC power adapter
- Setup CD containing setup software and documentation
- Detachable antennas (2)

Back view



- **Antenna connector**—For connecting the included antennas.
- **Wireless activity indicator**—In Access Point mode, it lights up solid when the wireless interface is ready. In other modes, it lights up solid when the WAP300N connected to a router, access point, or another WAP300N. Flashes while actively sending or receiving data over a wireless connection.
- **Wi-Fi Protected Setup™ button**—Press this button to easily set up a wireless connection.
- **Wi-Fi Protected Setup indicator**—Stays on steadily following a successful Wi-Fi Protected Setup connection or when wireless security is enabled. Flashes slowly during Wi-Fi Protected Setup. Flashes quickly when there is a Wi-Fi Protected Setup error.
- **Ethernet port**—Connect a wired network device to this port.
- **Ethernet activity indicator**—Lights up when there is a wired connection. Flashes while actively sending or receiving data over the Ethernet port.
- **Power port**—Connect the included AC power adapter to this port.

CAUTION
Use only the adapter that came with your router.

- **Power indicator**—Stays on steadily while power is connected. Flashes slowly during bootup, firmware upgrades, and factory reset.

Bottom view

- **Reset button**—Press and hold this button for 5 seconds to reset the device to its factory defaults.

Setting Up: Basics

How to expand your home network

What is a network?

A network is any group of devices that can communicate with each other. A typical home network may include multiple computers, a printer, a modem (for Internet access), and a router. A large home network may also have a switch, additional routers, access points, and many Internet-capable media devices such as TVs, game consoles, and web cameras.

How to expand your home network

Your WAP300N provides several ways to increase your home network's capabilities and wireless range. You can use it as any of the following:

- **Access Point mode (default)**
- **Wireless Media Connector mode**
- **Wireless Range Extender mode**
- **Wireless Bridge mode**

Refer to the following pages for more detailed explanations and example diagrams.

Where to find more help

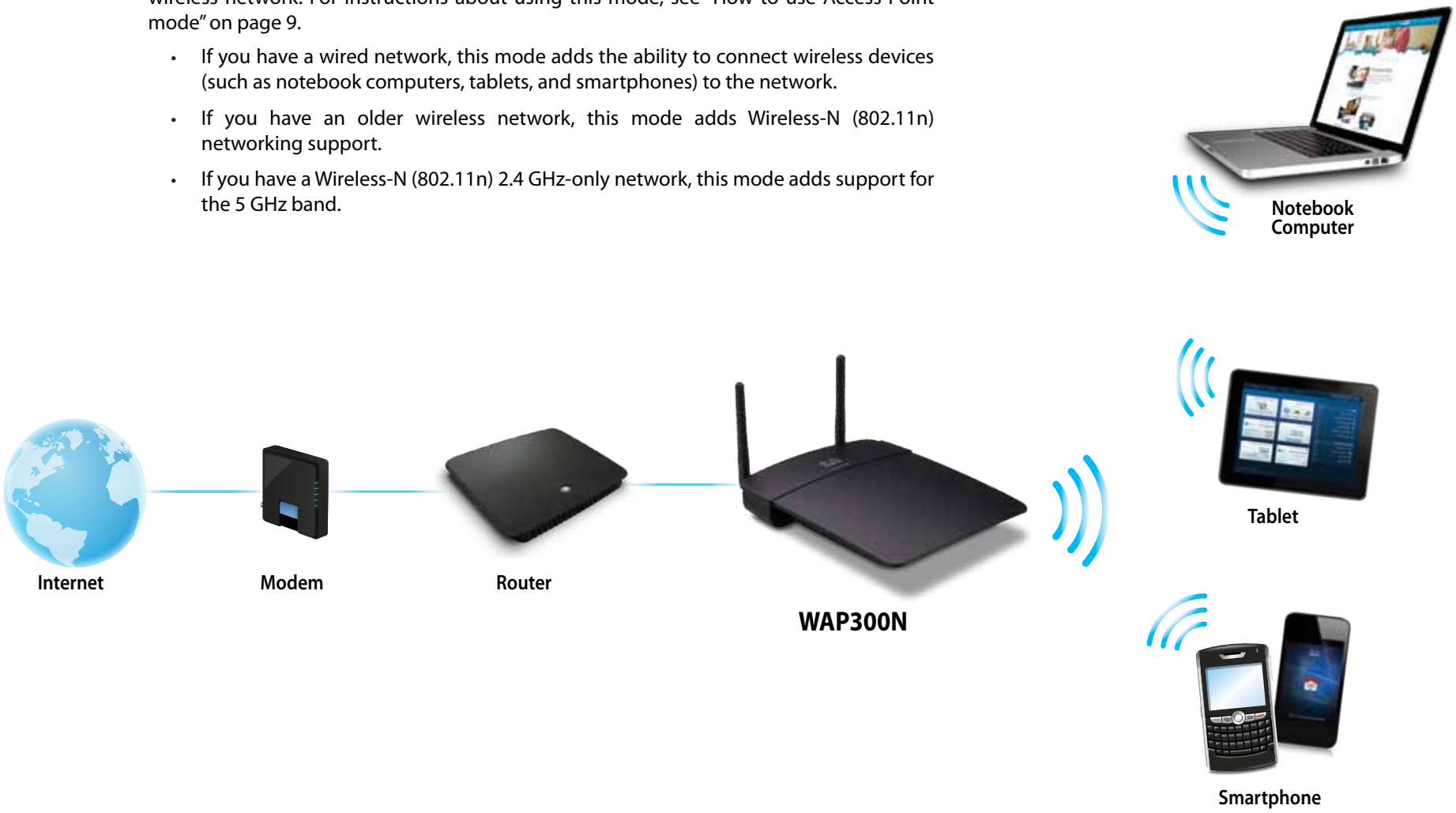
In addition to this *User Guide*, you can also find help at **Linksys.com/support** (documentation, downloads, FAQs, technical support, live chat, forums).

Operating modes

Access Point Mode

Adds wireless networking to an existing wired (Ethernet) network or upgrades an existing wireless network. For instructions about using this mode, see "How to use Access Point mode" on page 9.

- If you have a wired network, this mode adds the ability to connect wireless devices (such as notebook computers, tablets, and smartphones) to the network.
- If you have an older wireless network, this mode adds Wireless-N (802.11n) networking support.
- If you have a Wireless-N (802.11n) 2.4 GHz-only network, this mode adds support for the 5 GHz band.



Wireless Media Connector mode

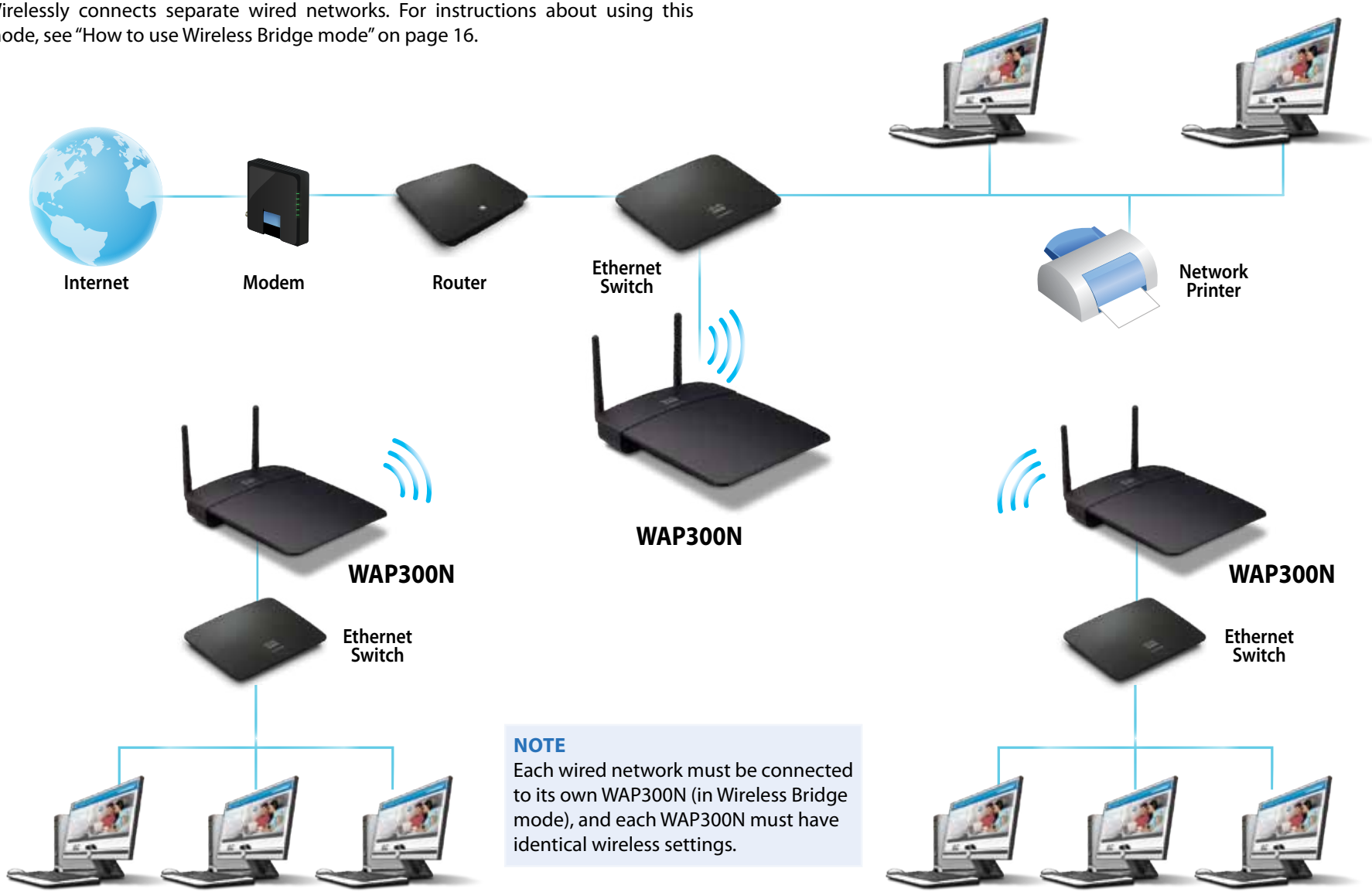
Adds wireless networking capability to any wired (Ethernet) device. For instructions about using this mode, see "How to use Wireless Media Connector mode" on page 12.

Wireless Range Extender mode

Extends the wireless range of an existing wireless network, and also adds wireless networking capability to any wired (Ethernet) device. For instructions about using this mode, see "How to use Wireless Range Extender mode" on page 15.

Wireless Bridge mode

Wirelessly connects separate wired networks. For instructions about using this mode, see "How to use Wireless Bridge mode" on page 16.



NOTE
Each wired network must be connected to its own WAP300N (in Wireless Bridge mode), and each WAP300N must have identical wireless settings.

How to install your WAP300N

The easiest way to install your WAP300N is to use the included Setup CD.

NOTE
The Setup CD can only help you set up the WAP300N in Access Point mode. For more information and examples of other modes, see the diagrams on pages 4 to 7.

To install your WAP300N:

1. Insert the CD into your CD or DVD drive. Make sure that the computer is already connected to your home network.
2. Click **Set up your wireless access point**.

   If you do not see this:

   For Windows, find and click **Computer**, then double-click the **CD** drive and the **Setup** icon.

   For Mac, double-click the **CD** icon on your desktop, then double-click the **Setup** icon.
3. Follow the on-screen instructions.

How to open the browser-based utility

For advanced configuration of the WAP300N, you need to open the browser-based utility.

To open the browser-based utility:

1. Connect the WAP300N to your network. For example, use the included cable to connect your WAP300N to the Ethernet port on your network router or a networked computer.
2. Open a web browser on a computer connected to your network, then enter the IP address of your WAP300N. You are prompted for a user name and password.

TIPS

- If the WAP300N is connected to a network with a DHCP server (usually the network router), find the device's IP address in the *DHCP client table* of your router (refer to your router's documentation for help). Use that IP address to open the browser-based utility.
- If there is no DHCP server, or if the WAP300N is not wirelessly connected to any other device and it is connected with an Ethernet cable directly to a computer, then the WAP300N uses **10.100.1.1** as its IP address until a DHCP server is detected.
- If you set a static IP address for the WAP300N through the browser-based utility, then enter the static IP address instead.

3. Leave the **User name** field blank, then type the password you created during Setup. If you did not create a new password, use the default password **admin**.
4. Click **OK**. The main menu opens.

How to use Access Point mode

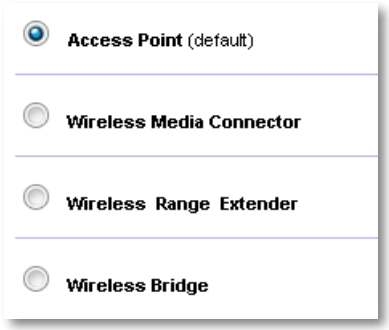
In addition to the topics below, see the topics "How to set up the MAC filter" on page 19 and "How to set up QoS (Quality of Service)" on page 20.

How to select Access Point mode

To select Access Point mode:

Setup > Operation Mode

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Setup** tab, then click the **Operation Mode** page.
3. Select **Access Point (default)**, then click **Save Settings**.



How to use Wi-Fi Protected Setup

While in Access Point mode, you can use Wi-Fi Protected Setup™ to easily connect wireless network devices to your wireless network.

You can use three methods for Wi-Fi Protected Setup:

- Press the Wi-Fi Protected Setup button on each device
- Enter the client device's Wi-Fi Protected Setup PIN onto the WAP300N
- Enter the WAP300N's Wi-Fi Protected Setup PIN onto the client device.

To manually configure your network, see "How to manually set up your WAP300N" on page 10).

NOTE

Your WAP300N must have Wi-Fi Protected Setup enabled before you can use it to connect network devices. In the browser-based utility, click the **Wireless** tab, then click the **Basic Wireless Settings** page and make sure that Wi-Fi Protected Setup is set to **Enabled**.

How to connect a device using the Wi-Fi Protected Setup button

Use this method if your device has a Wi-Fi Protected Setup button or prompts you to press the Wi-Fi Protected Setup button on your WAP300N .

To connect a device using the Wi-Fi Protected Setup button:

1. Press the **Wi-Fi Protected Setup** button on the network device you are connecting to.
2. Within two minutes, press the **Wi-Fi Protected Setup** button on the back of the WAP300N.

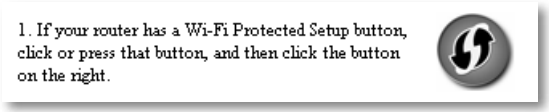
   - OR -

   a. Log into the WAP300N's browser-based utility (see "How to open the browser-based utility" on page 8).

   b. Click the **Wireless** tab, then click the **Basic Wireless Settings** page.

   c. For *Configuration View*, select **Wi-Fi Protected Setup™**.

   d. Click the **Wi-Fi Protected Setup** button in the *Wi-Fi Protected Setup* screen.



How to connect a device using its Wi-Fi Protected Setup PIN

Use this method if your device has a Wi-Fi Protected Setup *PIN* (Personal Identification Number).

To connect a device using the device's Wi-Fi Protected Setup PIN:

Wireless > Basic Wireless Settings

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Basic Wireless Settings** page.
3. For *Configuration View*, select **Wi-Fi Protected Setup™**.
4. Enter the PIN from the device into the **PIN** field on the WAP300N's *Wi-Fi Protected Setup* screen, then click **Register**.

The Wi-Fi Protected Setup status, wireless band, network name (SSID), and security mode are displayed at the bottom of the screen.

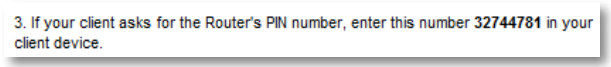
How to connect a device using the WAP300N's Wi-Fi Protected Setup PIN

Use this method if your client device asks for the WAP300N's *PIN* (Personal Identification Number).

To connect a device using the WAP300N's Wi-Fi Protected Setup PIN:

Wireless > Basic Wireless Settings

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Basic Wireless Settings** page.
3. For *Configuration View*, select **Wi-Fi Protected Setup™**.
4. On the client device, enter the PIN listed on the WAP300N's *Wi-Fi Protected Setup* screen. It is also listed on the bottom of the WAP300N. In the example below, the WAP300N's PIN is 32744781.



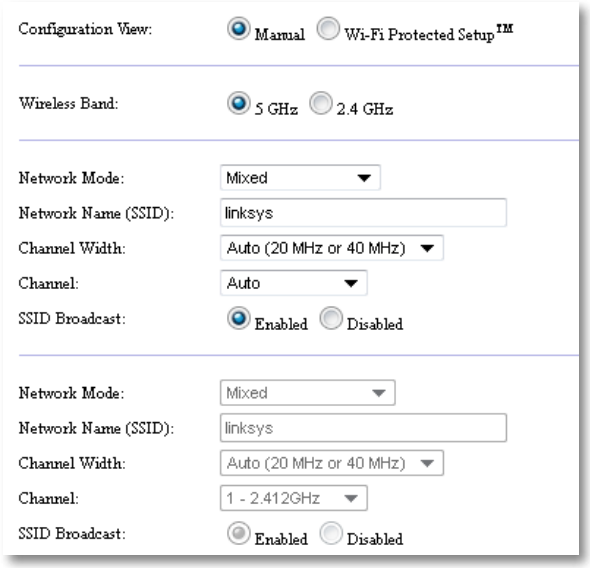
The Wi-Fi Protected Setup status, wireless band, network name (SSID), and security mode are displayed at the bottom of the screen.

How to manually set up your WAP300N

To manually set up your access point:

Wireless > Basic Wireless Settings

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Basic Wireless Settings** page.
3. For *Configuration View*, select **Manual**.


Configuration View: Manual Wi-Fi Protected Setup™
Wireless Band: 5 GHz 2.4 GHz
Network Mode: Mixed
Network Name (SSID): linksys
Channel Width: Auto (20 MHz or 40 MHz)
Channel: Auto
SSID Broadcast: Enabled Disabled
Network Mode: Mixed
Network Name (SSID): linksys
Channel Width: Auto (20 MHz or 40 MHz)
Channel: 1 - 2.412GHz
SSID Broadcast: Enabled Disabled

4. Configure the following fields:

   Wireless Band—Select the 2.4 GHz or 5 GHz radio band. The 5 GHz band is much less crowded than the 2.4 GHz band, so it is more likely to be free from interference. Although the 5 GHz band is ideal for streaming multimedia, not all wireless client devices support the 5 GHz radio band.

   Network Mode (5 GHz)—Select your network's wireless standard. If you have both Wireless-N (802.11n) and Wireless-A (802.11a) devices in your network, keep the default setting, **Mixed**. If you have only Wireless-N devices in your network, select **Wireless-N Only**. If you have only Wireless-A devices in your network, select **Wireless-A Only**.

   Network Mode (2.4 GHz)—Select your network's wireless standard. If you have Wireless-N (802.11n), Wireless-G (802.11g), and Wireless-B (802.11b) devices in your network, keep the default, **Mixed**. If you have only Wireless-N devices, select **Wireless-N Only**. If you have only Wireless-G and Wireless-B devices in your network, select **Wireless-B/G Only**. If you have only Wireless-G devices, select **Wireless-G Only**. If you have only Wireless-B devices, select **Wireless-B Only**.

   Network Name (SSID)—The SSID is the name of your wireless network. This network name is shared among all the wireless devices connected to your wireless network. The SSID is case-sensitive.

   Channel Width—For best performance in a Wireless-N network, select **40 MHz** only (available only in the 5 GHz radio band) or **Auto**. In Auto mode, the WAP300N and the network client devices automatically switch to the 40 MHz mode if:

   - Your wireless client devices support the 40 MHz mode in which two 20 MHz channels are bonded together for better performance.

     and

   - There is no adjacent interference.

   Channel—Select the operating channel for your wireless network. Your WAP300N will automatically select the channel with the least amount of interference if you leave the default *Auto* setting. We recommend keeping the default (Auto).

   SSID Broadcast—Select **Enabled** (default) to allow wireless client devices to "see" the wireless network name. If you do not want to broadcast the WAP300N's SSID, select **Disabled**. We recommend keeping the default setting (Enabled).

5. Click **Save Settings**.

How to set up wireless security

To set up wireless security for your WAP300N in Access Point mode:

Wireless > Wireless Security

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Wireless Security** page and select the **Security Mode**. (We recommend *WPA2 Personal* for most home networks.)

Depending on the security mode you selected, you may be asked to enter additional information (see the following table).

Security mode	Information Required	Description
WPA2/WPA Mixed Mode, WPA2 Personal, WPA Personal	Passphrase	Enter the passphrase of 8-63 characters.
WPA2/WPA Enterprise Mixed Mode, WPA2 Enterprise, WPA Enterprise	RADIUS Server	Enter the IP address of the RADIUS server.
	RADIUS Port	Enter the port number of the RADIUS server. The default is **1812**.
	Shared Key	Enter the key shared between the router and the server.
WEP	Encryption	Select a level of WEP encryption, 40/64-bit (10 hex digits) or 104/128-bit (26 hex digits).
	Key 1	Enter the WEP key of your network. Key 1 is the transmit key used by this device.

RADIUS	RADIUS Server	Enter the IP address of the RADIUS server.
	RADIUS Port	Enter the port number of the RADIUS server. The default is **1812**.
	Shared Key	Enter the key shared between the router and the server.
	Encryption	Select a level of WEP encryption, 40/64-bit (10 hex digits) or 104/128-bit (26 hex digits).
	Key 2	Enter the WEP key of your network. Key 2 is the transmit key used by this device.

3. After you have entered all required information, click **Save Settings**.

How to use Wireless Media Connector mode

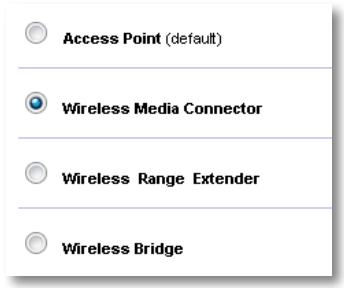
In addition to the topics below, see the topic "How to set up QoS (Quality of Service)" on page 20.

How to select Wireless Media Connector mode

To select Wireless Media Connector mode:

Setup > Operation Mode

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Setup** tab, then click the **Operation Mode** page.
3. Select **Wireless Media Connector**, then click **Save Settings**.



We recommend using wireless network site survey to set up your WAP300N in Wireless Media Connector mode. Wireless network site survey identifies wireless networks with in the range of your WAP300N, so that you can easily select one of them to connect to. For instructions, see How to run a wireless network site survey below.

How to run a wireless network site survey

We recommend using wireless network site survey to set up your WAP300N in Wireless Media Connector mode. Wireless network site survey identifies wireless networks within range of your WAP300N, so that you can easily select one of them to connect to.

To run a wireless network site survey:

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Wireless Network Site Survey** page. The site survey runs and displays the following information:

Select	Wireless Network Name	GHz	Signal	Security
○	Cisco06647_24g	2.4	0%	WPA2 Personal
○	SepiaMaple	2.4	0%	WPA2 Personal
○	SepiaMaple-guest	2.4	0%	Disabled
○	E4200v1RS	2.4	29%	WPA2 Personal
○	Cisco97475	2.4	0%	Disabled
○	160nnnnn	2.4	15%	Disabled
○	X3500	2.4	0%	WPA2 Personal

Number of Wireless Networks—The number of wireless networks that were detected.

Wireless Network Name—The network name (SSID) of each discovered wireless network.

Signal—The percentage of signal strength.

Security—The security method used by each wireless network. If the network supports Wi-Fi Protected Setup, the Wi-Fi Protected Setup icon appears next to the security method.

Refresh—Updates the on-screen information.

3. To connect to a wireless network, select the network, then click **Connect**.

   A screen opens that shows you the network name (SSID) and security mode of the selected wireless network. Depending on the security mode of the network, you may be asked to enter additional information (see the following table).

Security mode	Information Required	Description
WPA/WPA2 Personal	Passphrase	Enter the passphrase shared by this device and your wireless router (or access point).
WEP	Encryption	Select a level of WEP encryption, 40 / 64-bit (10 hex digits) or 104 / 128-bit (26 hex digits).
	Key 1	Enter the WEP key of your network. Key 1 is the transmit key used by this device.
	Authentication	The default is *Auto*, which allows either *open system* or *shared key* authentication to be used. Select **Open** to use open system authentication (a WEP key is not used for authentication). Select **Shared** to use shared key authentication (a WEP key is used for authentication).

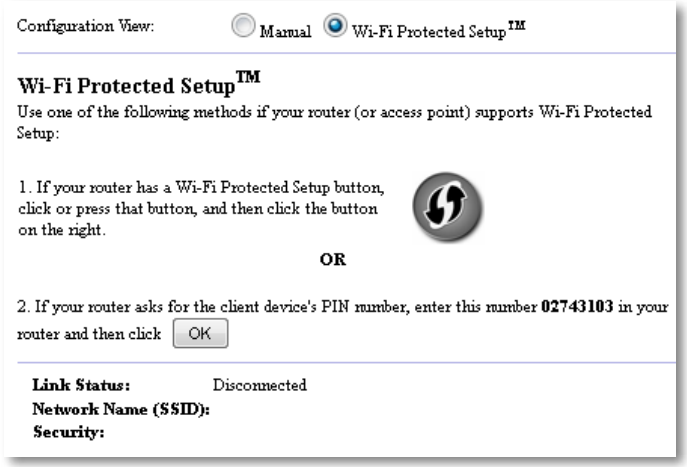
4. After you have entered all required information, click **Connect** to connect to the network.

How to use Wi-Fi Protected Setup

If your wireless router or access point supports Wi-Fi Protected Setup, you can use it to easily connect your WAP300N to your wireless router or access point.

You can use two methods for Wi-Fi Protected Setup:

- Press the Wi-Fi Protected Setup button on each device
- Enter the WAP300N's Wi-Fi Protected Setup PIN onto the router or access point.


Configuration View:
Manual
Wi-Fi Protected Setup™
Wi-Fi Protected Setup™
Use one of the following methods if your router (or access point) supports Wi-Fi Protected Setup:
1. If your router has a Wi-Fi Protected Setup button, click or press that button, and then click the button on the right.
OR
2. If your router asks for the client device's PIN number, enter this number 02743103 in your router and then click
OK
Link Status:
Disconnected
Network Name (SSID):
Security:

To manually configure your network, see "How to manually set up your WAP300N" on page 14).

How to connect to a router or access point using the Wi-Fi Protected Setup button

Use this method to connect your WAP300N to a router or access point by pressing buttons on the two devices.

To connect to your router or access point using the Wi-Fi Protected Setup button:

1. Press the **Wi-Fi Protected Setup** button on the back of the router or access point.
2. Within two minutes, press the **Wi-Fi Protected Setup** button on the back of the WAP300N.

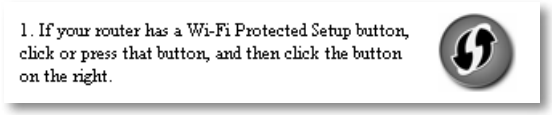
- OR -

a. Log into the WAP300N's browser-based utility (see "How to open the browser-based utility" on page 8).

b. Click the **Wireless** tab, then click the **Basic Wireless Settings** page.

c. For *Configuration View*, select **Wi-Fi Protected Setup™**.

d. Click the **Wi-Fi Protected Setup** button in the *Wi-Fi Protected Setup* screen.



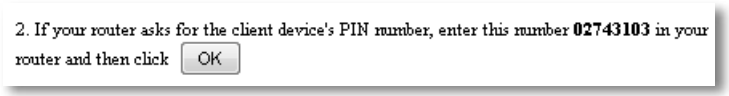
How to connect to a router or access point using the WAP300N's Wi-Fi Protected Setup PIN

Use this method if your router or access point asks for the WAP300N's *PIN* (Personal Identification Number).

To connect a device using the WAP300N's Wi-Fi Protected Setup PIN:

Wireless > Basic Wireless Settings

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Basic Wireless Settings** page.
3. For *Configuration View*, select **Wi-Fi Protected Setup™**.
4. On the router or access point's browser-based utility, enter the PIN listed on the WAP300N's *Wi-Fi Protected Setup* screen. It is also listed on the bottom of the WAP300N. In the example below, the WAP300N's PIN is 02743103.



The Wi-Fi Protected Setup status, wireless band, network name (SSID), and security mode are displayed at the bottom of the screen.

5. Click **OK** on the WAP300N's Wi-Fi Protected Setup screen.

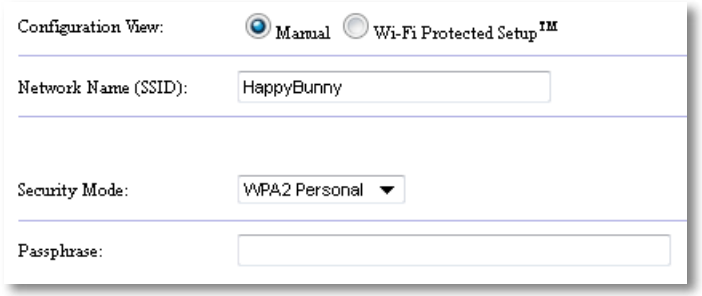
How to manually set up your WAP300N

You can follow these instructions to connect your WAP300N to your router, or you can use Wireless Network Site Survey to connect. For more information about site survey, see "How to run a wireless network site survey" on page 12.

To manually set up your WAP300N in wireless media connector mode:

Wireless > Basic Wireless Settings

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Basic Wireless Settings** page.
3. For *Configuration View*, select **Manual**.



4. Configure the following fields:

Network Name (SSID)—The SSID is the name of your wireless network. This network name is shared among all the wireless devices connected to your wireless network, so the SSID you enter here must match the router's SSID exactly (the SSID is case-sensitive).

Security Mode—Select the security mode that matches the security setting on your router or access point. If the setting here does not match the setting on your router or access point, it will not be able to connect.

Depending on the security mode you select, you may be asked to enter additional information. Refer to the following table.

Security mode	Information Required	Description
WPA/WPA2 Personal	Passphrase	Enter the passphrase shared by this device and your wireless router (or access point).
WEP	Encryption	Select a level of WEP encryption, 40 / 64-bit (10 hex digits) or 104 / 128-bit (26 hex digits).
	Key 1	Enter the WEP key of your network. Key 1 is the transmit key used by this device.
	Authentication	The default is *Auto*, which allows either *open system* or *shared key* authentication to be used. Select **Open** to use open system authentication (a WEP key is not used for authentication). Select **Shared** to use shared key authentication (a WEP key is used for authentication).

5. Click **Save Settings**.

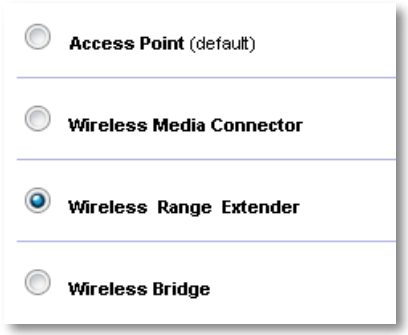
How to use Wireless Range Extender mode

How to select Wireless Range Extender mode

To select Wireless Range Extender mode:

Setup > Operation Mode

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Setup** tab, then click the **Operation Mode** page.
3. Select **Wireless Range Extender**, then click **Save Settings**.



How to run a wireless network site survey

We recommend using wireless network site survey to set up your WAP300N in Wireless Range Extender mode. For instructions on using wireless network site survey to connect your WAP300N to a wireless router, see "How to run a wireless network site survey" on page 12).

How to use Wi-Fi Protected Setup

While in Range Extender mode, you can use Wi-Fi Protected Setup™ to easily connect your WAP300N to your wireless router and wireless client devices. The way you use Wi-Fi Protected Setup for your WAP300N varies, depending on whether your WAP300N has already connected to the router.

If your WAP300N has *not yet* connected to a router:

- To connect your WAP300N to a wireless router, follow the instructions in "How to use Wi-Fi Protected Setup" on page 13.

If your WAP300N has *already* connected to a router:

- To connect your WAP300N to a wireless client device, follow the instructions in "How to use Wi-Fi Protected Setup" on page 9.

How to manually set up your WAP300N

You can manually set up your WAP300N's connection to a wireless router, or you can change its existing connection to a wireless router.

If your WAP300N has *not yet* connected to a router:

- Follow the instructions in "How to manually set up your WAP300N" on page 14).

If your WAP300N has *already* connected to a router:

1. Refer to "How to manually set up your WAP300N" on page 14) for information on the menu's fields.
2. To connect to a different router, change the field values, then click **Save Settings**.

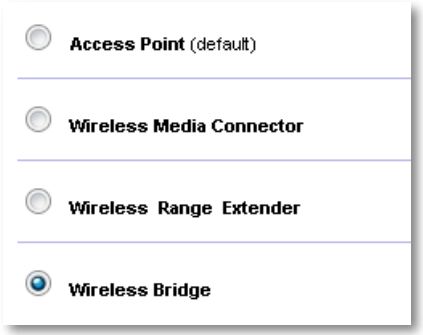
How to use Wireless Bridge mode

How to select Wireless Bridge mode

To select Wireless Bridge mode:

Setup > Operation Mode

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Setup** tab, then click the **Operation Mode** page.
3. Select **Wireless Bridge**, then click **Save Settings**.



How to set up Wireless Bridge Mode

To set up Wireless Bridge mode:

Wireless > Basic Wireless Settings

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Basic Wireless Settings** page.

Local Wi-Fi MAC Address: 00:11:E0:04:2F:86
Remote Wireless Bridges' Wi-Fi MAC Addresses:
Note: When set to "Wireless Bridge" mode, this device will communicate only with another WAP300N in "Wireless Bridge" mode. Wireless settings, including wireless band, channel, channel width, security mode and passphrase/key, are required to be the same on all networked wireless bridges.
Wireless Band:
5 GHz
2.4 GHz
Channel Width:
Auto (20 MHz or 40 MHz)
Channel:
36 - 5.180GHz
Channel Width:
Auto (20 MHz or 40 MHz)
Channel:
1 - 2.412GHz

Local Wi-Fi MAC Address—The Wi-Fi MAC address of this device.

Remote Wireless Bridges' Wi-Fi MAC Addresses—Enter the Wi-Fi MAC addresses of other WAP300N wireless bridges that you want this WAP300N to connect to.

Wireless Band—Select the 2.4 GHz or 5 GHz radio band. The 5 GHz band is less crowded than the 2.4 GHz band, so that band is more likely to be free from interference.

Channel Width—For best performance in a Wireless-N network, select **40 MHz** only (available only in the 5 GHz radio band) or **Auto**. In *Auto* mode, this device and other WAP300N devices connected to this one automatically switch to the 40 MHz mode if there is no interference.

Channel—Choose the operating channel for your wireless network.

CAUTION

While in Wireless Bridge mode, this device can communicate with other WAP300N devices only if they are also in Wireless Bridge mode and the wireless settings are all identical.

Example 1

You want to connect two wired networks together using Two WAP300N devices. One WAP300N will need to be on each network. We will call one (A) and the other (B). To make this work:

1. Enter (A)'s Local Wi-Fi MAC Address into (B)'s *Remote Wireless Bridges' Wi-Fi MAC Addresses* field.
2. Enter (B)'s Local Wi-Fi MAC Address into (A)'s *Remote Wireless Bridges' Wi-Fi MAC Addresses* field.

Example 2

You want to connect three wired networks together using three WAP300N devices. One WAP300N will need to be on each network. In this example, they will be called (A), (B), and (C). To make this work:

1. Enter (A)'s and (C)'s Local Wi-Fi MAC Addresses into (B)'s *Remote Wireless Bridges' Wi-Fi MAC Addresses* field.
2. Enter (B)'s Local Wi-Fi MAC Address into (A)'s *Remote Wireless Bridges' Wi-Fi MAC Addresses* field.
3. Enter (B)'s Local Wi-Fi MAC Address into (C)'s *Remote Wireless Bridges' Wi-Fi MAC Addresses* field.

   This establishes a wireless connection between (A) and (B) and another connection between (B) and (C). This approach links all three wired networks together.

CAUTION

Do not create a *loop* in your network. In the above example, a *loop* would be adding an (A)-to-(C) wireless connection, while you already had an (A)-to-(B) and (B)-to-(C) wireless connection.

How to set up wireless security

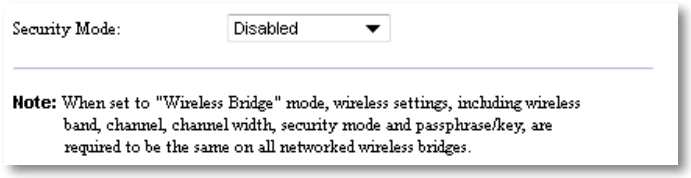
CAUTION

While in Wireless Bridge mode, this device can communicate with other WAP300N devices only if they are also in Wireless Bridge mode and the wireless settings are all identical.

To set up wireless security for your WAP300N in Wireless Bridge mode:

Wireless > Wireless Security

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Wireless Security** page and select the **Security Mode**. (*WPA2 Personal* is recommended for most home networks.)


Security Mode:
Disabled
Note: When set to "Wireless Bridge" mode, wireless settings, including wireless band, channel, channel width, security mode and passphrase/key, are required to be the same on all networked wireless bridges.

Depending on the security mode you selected, you may be asked to enter additional information (see the following table).

Security mode	Information Required	Description
WPA2 Personal, WPA Personal	Passphrase	Enter the passphrase of 8-63 characters.
WEP	Encryption	Select a level of WEP encryption, 40/64-bit (10 hex digits) or 104/128-bit (26 hex digits).
	Key 1	Enter the WEP key of your network. Key 1 is the transmit key used by this device.

3. After you have entered all required information, click **Save Settings**.

Setting Up: Advanced

How to set up the MAC filter

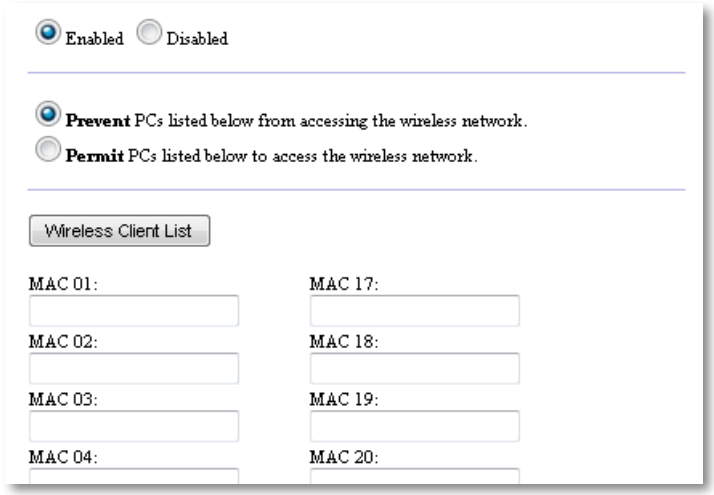
For: Access Point mode only

When your WAP300N is in Access Point mode, you can filter access to your wireless network by specifying Wi-Fi MAC addresses of the wireless devices within range of your network.

To set up the MAC filter:

Wireless > Wireless MAC Filter

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **Wireless MAC Filter** page.



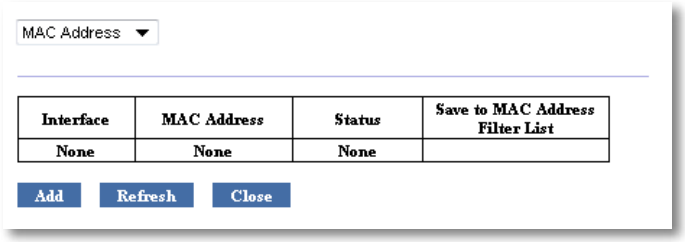
3. Configure the following settings:

   Wireless MAC Filter—To filter wireless devices by MAC address, select **Enabled**. If you do not want to filter by MAC address, keep the default setting, **Disabled**.

   Access Restriction—To block wireless access by MAC address, select **Prevent**. To allow wireless access by MAC address, select **Permit**.

   MAC 01-32—Enter the Wi-Fi MAC addresses of the devices you want to block or allow.

4. *Optional*: Click **Wireless Client List** to open the *Wireless Client List* screen. This screen shows computers and other devices on the wireless network. The list can be sorted by *MAC Address* or by *Status*.



   - To add a device to the list, select **Save to MAC Address Filter List**, then click **Add**.
   - To retrieve the latest network information, click **Refresh**.
   - To return to the *Wireless MAC Filter* screen, click **Close**.

5. Click **Save Settings** to apply your changes.

How to set up QoS (Quality of Service)

For: Access Point and Wireless Media Connector modes only

To set up QoS:

Wireless > QoS

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Wireless** tab, then click the **QoS** page.

3. Configure the following settings:

   WMM Support—Wi-Fi Multimedia (WMM) is a wireless QoS feature that improves quality for audio, video, and voice applications by prioritizing wireless traffic. To use WMM, the other wireless devices connected to the WAP300N must also support WMM.

   No Acknowledgement—If you do not want the WAP300N to re-send data each time an error occurs, select **Enabled**. Otherwise, keep the default, **Disabled**.

How to change the IP address

You can choose whether the WAP300N gets its IP address automatically (using the DHCP server) or manually (static IP) by setting it in the browser-based utility.

NOTES

- For most home networks, we recommend leaving this setting at **Automatic Configuration - DHCP**.
- If there is no DHCP server, or if the WAP300N is not wirelessly connected to any other device and it is connected with an Ethernet cable directly to a computer, then the WAP300N uses **10.100.1.1** as its IP address until a DHCP server is detected and a new IP address is assigned.

To set your WAP300N's IP address:

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. For *Device IP*, select **Static IP**, then complete the following fields:
   - **IP Address**—Enter a unique IP address that will be used to access the browser-based utility.
   - **Subnet Mask**—Enter the subnet mask of your network.
   - **Default Gateway**—Enter the IP address of the default gateway for your network (in most cases, this is your router).
3. Click **Save Settings** to apply your changes.

How to change the password

You can change the WAP300N's password to limit access to the browser-based utility.

To change the password:

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Administration** tab, then click the **Management** page.
3. Enter the new password in the **Device Password** field, then enter it again in the **Re-enter to confirm** field.

4. Click **Save Settings**.

How to change the idle timeout

You are automatically logged out of the browser-based utility after a period of inactivity. You can set the length of the inactive period.

To change the idle timeout:

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Administration** tab, then click the **Management** page.
3. Enter the new timeout period in the **Idle Timeout** field. You can enter a range of 60 to 3,600 seconds.

4. Click **Save Settings** to apply your changes.

How to disable wireless admin access

For additional security, you can disable the ability to wirelessly log into the browser-based utility. With wireless access disabled, to run the browser-based utility you must use a wired connection.

To disable wireless admin access:

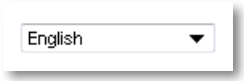
1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Administration** tab, then click the **Management** page.
3. For *Access via Wireless*, select **Disabled**, then click **Save Settings**.

How to change the browser-based utility's language

To change the browser-based utility's language:

Setup > Basic Setup

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8). The *Basic Setup* page opens.
2. For *Language*, select the language, then click **Save Settings**.



Maintaining and Monitoring

Troubleshooting

If you forgot your device password or static IP address

If you have forgotten your WAP300N admin password, or if you have set a static IP address but have forgotten it, you can reset the device to its factory default settings. To restore your WAP300N to its factory settings, see "How to restore your WAP300N's factory settings" on page 23.

How to back up and restore your WAP300N configuration

As with any valuable data, you should back up your WAP300N configuration, because it might contain many customized settings. Those settings would be lost if you reset your WAP300N to its factory defaults, and you would need to re-enter all of them manually. If you back up your device configuration, restoring settings is easy.

To back up your WAP300N configuration:

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Administration** tab, then click the **Management** page.
3. Click **Back Up Configurations**, then follow the on-screen instructions to save the file.

TIP
To save multiple backup files, include the backup date in the filename as you save.

To restore your WAP300N configuration:

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Administration** tab, then click the **Management** page.
3. Click **Browse** and select the configuration file, then click **Open**.
4. Click **Restore Configurations**, then follow the on-screen instructions.

How to reboot your WAP300N

After changing network settings, or as a troubleshooting step, it is sometimes necessary to *reboot* (restrart) your WAP300N.

To reboot your WAP300N:

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Administration** tab, then click the **Management** page.
3. Click **Start to Reboot**.

-OR-

1. Disconnect the power cable for ten seconds, then reconnect the cable.

How to restore your WAP300N's factory settings

If custom settings on your WAP300N are not working correctly, or if you have forgotten the access password or static IP address, you may need to restore your WAP300N to its factory settings.

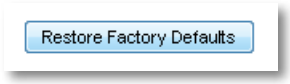
CAUTION
Any settings you have saved previously will be lost when the factory default settings are restored.

To restore your WAP300N's factory settings:

1. While the device is still connected to power, use a stiff wire (such as a straightened paper clip) to press the **Reset** button on the bottom for about five seconds.

-OR-

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Administration** tab, then click the **Factory Defaults** page.
3. Click **Restore Factory Defaults**.



A warning appears asking you to confirm.

4. Click **OK**. Your device is reset to factory defaults.

How to update your WAP300N

Linksys may periodically publish a firmware upgrade either to fix a problem or to add features to your WAP300N.

IMPORTANT
Do not interrupt the upgrade process. You should not turn off the device or press the Reset button during the upgrade. Doing so may permanently disable the device.

To upgrade the device's firmware:

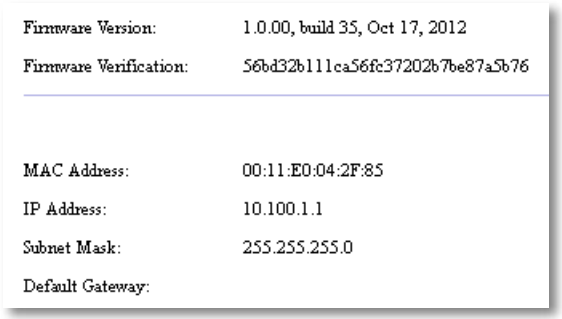
1. Open a web browser and go to **www.linksys.com/support**.
2. Download the device's latest firmware update file. Take note of the location where the file was saved to.
3. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
4. Click the **Administration** tab, then click the **Firmware Upgrade** page.
5. Click **Browse**, select the firmware upgrade file you saved previously, then click **Open**.

6. Click **Start to Upgrade**, then follow the on-screen instructions.

How to view device and local network information

To view device and local network information:

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Status** tab, then click the **Device Info & Local Network** page. Device and network information appears.



Firmware Version—The device's current firmware version.

Firmware Verification—Used by technical support to verify the firmware.

MAC Address—The device's Ethernet port MAC address.

IP Address—The device's IP address, as seen on your local network.

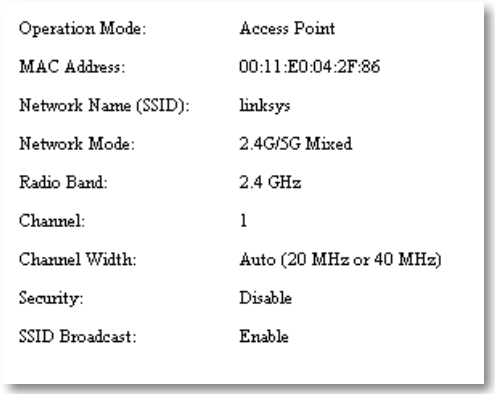
Subnet Mask—The subnet mask configured for your local network.

Default Gateway—The default gateway configured for your local network.

How to view wireless network information

To view wireless network information:

1. Log into the browser-based utility (see "How to open the browser-based utility" on page 8).
2. Click the **Status** tab, then click the **Wireless Network** page. Wireless network information appears. Available information depends on the current operating mode, although the list below shows all possible fields.



Operation Mode—The current operation mode of the device.

MAC Address—The MAC address of the device's wireless (Wi-Fi) interface.

Link Status—The status of the wireless connection.

Network Name (SSID)—The name of your wireless network.

Network Mode—Your wireless network's network mode.

Channel Width—Your wireless network's channel width (in MHz).

Radio Band—Your wireless network's radio band (in GHz).

Channel—Your wireless network's channel setting.

Security—Your wireless network's security mode.

Bit Rate—The data transmission rate.

Signal—The percentage of signal strength is displayed.

SSID Broadcast—SSID broadcast status (enabled or disabled).

Specifications

Linksys WAP300N

Model	WAP300N
Description	Linksys Wireless-N Access Point
Ethernet Port Speed	10/100 Mbps (Fast Ethernet)
Radio Frequency	2.4 or 5 GHz
Number of Antennas	2
Antenna Type	External dipole antenna with R-SMA connector
Detachable	Yes
Ports	Power, Ethernet
Buttons	Reset, Wi-Fi Protected Setup™, Power (European model only)
LEDs	Power, Wi-Fi Protected Setup, Ethernet, Wireless
Wireless Security Features	WEP, Wi-Fi Protected Access™ (WPA), Wi-Fi Protected Access™ 2 (WPA2), Wireless MAC Filtering
Security Key Bits	Up to 128-bit encryption

Environmental

Dimensions	188.7 × 151.7 × 31.2 mm (7.43" × 5.97" × 1.23") without external antennas
Unit Weight	207.0 g (7.3 oz), without external antennas 229.6 g (8.1 oz), with external antennas
Power	12V, 0.5A
Certifications	FCC, UL/cUL, ICES-003, RSS210, CE, Wi-Fi (IEEE 802.11a/b/g/n), WPA2™, WMM®, Wi-Fi Protected Setup™
Operating Temperature	0 to 40°C (32 to 104°F)
Storage Temperature	-20 to 60°C (-4 to 140°F)
Operating Humidity	10 to 80% non-condensing
Storage Humidity	5 to 90% non-condensing

NOTES

For regulatory, warranty, and safety information, see the CD that came with your device or go to **Linksys.com/support**.

Specifications are subject to change without notice.

Maximum performance derived from IEEE Standard 802.11 specifications. Actual performance can vary, including lower wireless network capacity, data throughput rate, range and coverage. Performance depends on many factors, conditions and variables, including distance from the access point, volume of network traffic, building materials and construction, operating system used, mix of wireless products used, interference and other adverse conditions.

Visit **linksys.com/support** for award-winning 24/7 technical support

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